

Amendments to the Specification:

Please replace paragraph [0002] with the following amended paragraph:

[0002] The present application is ~~related to U.S. Provisional Patent Application Serial No. 60/119,227, filed February 9, 1999 and entitled "FIBER OPTIC CONNECTOR," and to U.S. Patent Application No. 09/440,025, filed November 12, 1999 and entitled "FIBER OPTIC CONNECTOR," and to~~ claims the benefit of U.S. Provisional Patent Application Serial No. 60/246,287, filed November 6, 2000 and entitled "FIBER OPTIC CONNECTOR HAVING TRANSLATING TERMINI."

Please delete paragraph [0012] as shown:

[0012] ~~FIGURE 4 is a top view of a sleeve which provides a main body housing of the connector;~~

Please replace paragraph [0013] with the following amended paragraph:

[0013] ~~FIGURE 5~~ FIGURE 4 s a longitudinal section view of a portion of the connector, taken along section line 3-3 of FIGURE 2;

Please replace paragraph [0014] with the following amended paragraph:

[0014] ~~FIGURE 6~~ FIGURE 5 is a rearward-end view of a terminus retainer of the connector;

Please replace paragraph [0015] with the following amended paragraph:

[0015] ~~FIGURE 7~~ FIGURE 6 is a longitudinal section view of a terminus of one of the optical fibers of the connector, taken along section line 3-3 of FIGURE 2 and shown in a compressed and mated state;

Please replace paragraph [0016] with the following amended paragraph:

[0016] ~~FIGURE 8~~ FIGURE 7 is a sectional view of an alignment sleeve for joining together two adjoining termini of mating optical fibers, taken along section line 3-3 of FIGURE 2;

Please replace paragraph [0017] with the following amended paragraph:

[0017] ~~FIGURE 9~~ FIGURE 8 is a rearward-end view of the alignment sleeve;

Please replace paragraph [0018] with the following amended paragraph:

[0018] ~~FIGURE 10~~ FIGURE 9 is a longitudinal section view of two mating termini of mating optical fibers of the connectors, taken along section line 3-3 of FIGURE 2;

Please replace paragraph [0019] with the following amended paragraph:

[0019] ~~FIGURE 11~~ FIGURE 10 is a forward-end view of an insert body of the connector;

Please replace paragraph [0020] with the following amended paragraph:

[0020] ~~FIGURE 12~~ FIGURE 11 a sectional view of the insert body, taken along section line ~~12-12~~
~~of FIGURE 11~~ 11-11 of FIGURE 10;

Please replace paragraph [0021] with the following amended paragraph:

[0021] ~~FIGURE 13~~ FIGURE 12 is a rearward-end view of the insert body;

Please replace paragraph [0022] with the following amended paragraph:

[0022] ~~FIGURE 14~~ FIGURE 13 is a partial view of the top of the insert body, as viewed along
section line ~~14-14 of FIGURE 12~~ 13-13 of FIGURE 11;

Please replace paragraph [0023] with the following amended paragraph:

[0023] ~~FIGURE 15~~ FIGURE 14 is a sectional view of a split sleeve of the connector, taken along
section line ~~15-15 of~~ 14-14 of FIGURE 2;

Please replace paragraph [0024] with the following amended paragraph:

[0024] ~~FIGURE 16~~ FIGURE 15 is a forward-end view of the split sleeve of ~~FIGURE 15~~ FIGURE
14, showing forward flanges which are defined on the forward end of the split sleeve;

Please replace paragraph [0025] with the following amended paragraph:

[0025] ~~FIGURE 17~~ FIGURE 16 is a partial section view of the forward end of the split sleeve, taken along section line ~~17-17 of FIGURE 16~~ 16-16 of FIGURE 15;

Please replace paragraph [0026] with the following amended paragraph:

[0026] ~~FIGURE 18~~ FIGURE 17 is a rearward-end view of the split sleeve of ~~FIGURE 15~~ FIGURE 14, showing dogs which are separated by milled regions;

Please replace paragraph [0027] with the following amended paragraph:

[0027] ~~FIGURE 19~~ FIGURE 18 is a partial sectional view of the rearward end of the split sleeve, taken along section line ~~19-19 of Figure 18~~ 18-18 of Figure 17;

Please replace paragraph [0028] with the following amended paragraph:

[0028] ~~FIGURE 20~~ FIGURE 19 is an elevation view of the split sleeve, after the sleeve has been rotated ninety degrees around a central, longitudinal axis thereof, from the position shown in ~~FIGURE 15~~ FIGURE 14;

Please replace paragraph [0029] with the following amended paragraph:

[0029] ~~FIGURE 21~~ FIGURE 20 is an ~~exploded~~ elevation view of a retainer assembly of the connector;

Please replace paragraph [0030] with the following amended paragraph:

[0030] ~~FIGURE 22~~ FIGURE 21 is a forward-end view of the retainer assembly;

Please replace paragraph [0031] with the following amended paragraph:

[0031] ~~FIGURE 23~~ FIGURE 22 is a sectional view of an assemblage of the insert body, the split sleeve and the retainer assembly, taken along section line ~~23-23~~ line 22-22 of FIGURE 2;

Please replace paragraph [0032] with the following amended paragraph:

[0032] ~~FIGURE 24~~ FIGURE 23 is a cross-sectional view showing the engagement features for two of the fiber optic connectors after they have been coupled together, taken along section line 2-2 of FIGURE 1 and showing a primary keying arrangement;

Please replace paragraph [0033] with the following amended paragraph:

[0033] ~~FIGURE 25~~ FIGURE 24 is a cross-sectional view of a first alternative embodiment of two fiber optic connectors after they have been coupled together in a first alternative arrangement, as the view would appear if taken along section line 2-2 of FIGURE 1;

Please replace paragraph [0034] with the following amended paragraph:

[0034] ~~FIGURE 26~~ FIGURE 25 is a cross-sectional view of a second alternative embodiment of two fiber optic connectors after they have been coupled together in a second alternative keying arrangement, as the view would appear if taken along section line 2-2 of FIGURE 1;

Please replace paragraph [0035] with the following amended paragraph:

[0035] ~~FIGURE 27~~ FIGURE 26 is a sectional view of an alternative cable retainer for securing a fiber optic cable within the fiber optic connector;

Please replace paragraph [0036] with the following amended paragraph:

[0036] ~~FIGURE 28A~~ FIGURE 27 is a longitudinal section view of an alternative cable retainer nut; ~~FIGURE 28B~~ FIGURE 28 is a front view of the alternative cable retainer nut;

Please replace paragraph [0056] with the following amended paragraph:

[0056] ~~FIGURE 4 is a top view of the main body sleeve 42. Referring still to FIGURE 3, the~~ The exterior periphery 46 of the sleeve 42 includes an annular-shaped protuberance which defines a rib 52 having an annular-shaped shoulder 53 which extends transverse to the longitudinal axis 40.

Please replace paragraph [0058] with the following amended paragraph:

[0058] Referring ~~again~~ still to FIGURE 3, the connector housing 14 further includes the end cap 64, which is secured to the rearward end of the main body sleeve 42 by a threaded connection 66. An annular-shaped lip 68 protrudes inwardly from the rearward-most end of the cap 64 and defines a shoulder 70. The forward end of the cap 64 has forwardly facing annular-shaped recess 72 which defines a seal surface for receiving an O-ring 74. The O-ring 74 acts as both a seal and a resilient spring when coupling sleeve 16 is pressed against it during connection mate-up.

Please replace paragraph [0063] with the following amended paragraph:

[0063] A split sleeve 132 is mounted within the sleeve 42 of the connector housing 14. The split sleeve 132 preferably comprises two halves which are split in a longitudinal direction, parallel to the longitudinal axis 40. The split sleeve 132 includes an interior profile 134 which defines forward tabs 136 and rearward tabs 138, which provide coupling dogs. The rearward tabs 138 extend within the groove 110 of the retainer body 102. An interior groove 140 is formed into the forward end of the split sleeve 132. The periphery 142 of the split sleeve 132 has a shoulder 144 and seal glands 146 and 148. O-rings 150 and 152 are disposed in respective ones of the grooves 146 and 148, and are used as garter springs. The tabs 136 define a forward end 154 of the split sleeve 132. Two access windows 328 (shown in ~~Figures 14 and 19~~ FIGURES 13 and 18) extend longitudinally in the split sleeve 132.

Please replace paragraph [0066] with the following amended paragraph:

[0066] ~~FIGURE 5~~ FIGURE 4 is a longitudinal section view of the insert assembly 162, taken along Section Line 3-3 of FIGURE 2. The two tangs 20 preferably extend for a shorter distance from the face 19 of the insert cap than the tower frame 18, as shown, providing clearances between opposing ones of the tangs 20 of the mating connectors 12. The screws 36 also preferably extend from the face 19 insert cap 168 for a shorter distance than the termini 34 to provide clearance between opposing ones of the screws 36 of the mating connectors 12. The insert body 164 has two threaded bores 172 (one shown) which are disposed 180° apart across the longitudinal axis 40, on opposite sides of the insert body 164. A threaded shank 174 of the two captive retaining screws 36 (one shown) extend within the threaded bore 172 to secure the insert cap 168 to the insert body 164. The two screws 36 may be removed from the hole 172, and then the insert cap 168 may be removed from the insert body 164. A seal gland 176 extends into an exterior periphery of the insert body 164 for receiving an O-ring seal element 178. An exterior profile 180 defines flats 314 and lip portions 318 (also shown in ~~Figure 13~~ FIGURE 12) that mate with the tabs 136 of the split sleeve 132 (shown in FIGURE 3). Four bores 188 (one shown) extend through the insert body 164 for receiving respective ones of the termini 34.

Please replace paragraph [0067] with the following amended paragraph:

[0067] The termini retainer 166 includes four bores 190 (one shown) and four slots 198 are shown) for entrapping the rearward ends of the termini 34 through respective ones of the bores 188. (See also ~~FIGURE 6~~ FIGURE 5). The bores 188 and 190 have longitudinal axes 186, which are parallel to the longitudinal axis 40. The rearward-most end of the bores 190 have a tapered surface 192, which widens in a rearward direction relative to the longitudinal axis 40. Forward portions 194 of the bores 190 provide cylindrical surfaces. The forward face 196 of the retainer 166 provides an annular retainer shoulder for retaining one of the termini 34 within the insert assembly 162. Each of the termini 34 is passed through a respective one of the slots 198 and into a respective ones of the bores 190, and then four of the termini are inserted together into respective ones of the bores 188.

Please replace paragraph [0070] with the following amended paragraph:

[0070] ~~FIGURE 6~~ FIGURE 5 is a rearward-end view of the terminus retainer 166. The terminus retainer 166 has the four bores 190 and the tapered portions 192. Four slots 198 extend from the edges of the outer periphery of the retainer 166 and connect with the bores 190, for sliding the pin bodies 216 of the termini 34 into the bores 190. The four bores 190 and the four slots 198 are each angularly displaced equal angular distances around the longitudinal axis 40, preferably having center lines which are ninety degrees apart. The four slots 198 are angularly disposed around the axis 40 such that they align with respective ones of the bores 190, and preferably have widths which are the same size as and align with the diameters of the bores 190. An alignment hole 200 is provided for receiving an alignment pin 317 (shown in ~~FIGURE 12~~ FIGURE 11) to prevent rotation of the terminus retainer 166 relative to the insert body 164. The terminus retainer 166 is held against the insert body 164 by a forward facing shoulder defined by a groove 320 formed into the split sleeve 320 (shown in ~~FIGURE 15~~ FIGURE 14).

Please replace paragraph [0071] with the following amended paragraph:

[0071] ~~FIGURE 7~~ FIGURE 6 is a longitudinal section view of one of the termini 34, taken along section line 3-3 of FIGURE 2, and shown after being compressed by the terminus retainer 166 (shown in ~~FIGURE 5~~ FIGURE 4). The one of the termini 34 is shown mounted on the terminal end of an optical fiber 214, and includes a pin body 216 and a ferrule 218. Each of the termini 34 has a longitudinal axis 220 which preferably extends substantially parallel to the longitudinal axis 40 of the connector 12 (shown in FIGURE 3). The pin body 216 has a longitudinally extending bore 222 and a forwardly disposed counter bore 224, which are concentric with the longitudinal axis 220. The bore 222 is sized for receiving the optical fiber 214 and the clad which extends around the core defined by the fiber 214. The ferrule 218 is rigidly secured in the forwardly disposed bore 224. An annular groove 226 extends into an exterior surface of the pin body 216 for receiving a retaining ring 228.

Please replace paragraph [0072] with the following amended paragraph:

[0072] A retaining collar 230 is secured around an exterior 232 of the pin body 216. The retaining collar 230 is secured in the bore 188 of the insert body 164 by the terminus retainer 166. The retaining collar 230 has an inner profile 234 defined by a tapered surface 236 and a tapered surface 238, which each taper toward the center of the retaining collar 230, such that the surface 236 and the surface 238 are wider at the outward ends. A protuberance 240 extends interiorly within the retaining collar 230, disposed between the tapered surface 236 and the tapered surface 238. The annular-shaped protuberance 240 defines an annular-shaped gimbal ring surface. The gimbal surface defined by the annular protuberance 240 extends inward and against the exterior periphery 232 of the pin body 216, such that the pin body 216 may be angularly displaced relative to the retaining collar 230, pivoting about the point of contact between the annular-shaped protuberance 240 and the pin body 216. An annular-shaped rib 244 extends from the exterior periphery 232 on the forward end of the pin body 216. The forward end of the annular-shaped rib 244 defines a shoulder 270 which engages the rearward facing shoulder 206 of the insert cap 168 (shown in ~~FIGURE 5~~ FIGURE 4) to retain the termini 34 within respective ones of the bores 188 (shown in ~~FIGURE 5~~ FIGURE 4).

Please replace paragraph [0074] with the following amended paragraph:

[0074] The floating seal 252 includes an annular ring 253 and a floating collar 254 which slidably extend around over the pin body 216. The annular ring 253 is preferably a flat washer. In some embodiments, the annular ring 253 may be omitted, but is provided herein to prevent a spring 246 from jamming between the pin body 216 and the floating collar 254. The floating collar 254 is annular-shaped, and preferably has a U-shaped cross-section and an interior bore 248 which may move longitudinally along the pin body 216, parallel to the longitudinal axis 220. The movement of the floating collar 254 in a direction transverse to the longitudinal axis 220 is limited by both a clearance fit between the interior bore 248 and the periphery of the pin body 216, and the clearance between the outside diameter of the floating collar 254 and the bore 188 of the insert body 164 (shown in ~~FIGURE 5~~ FIGURE 4). The collar 254 includes a rearwardly facing shoulder 256 and a cylindrical, exterior-facing seal surface 258. A forward face of the collar 254 defines a forwardly facing seal surface 260. A rearward facing shoulder of the annular-shaped rib 244 defines a seal surface 262. An O-ring seal element 264 sealingly engages between the seal surface 258 and one of the interior bores 188 of the insert body 164 (shown in ~~FIGURE 5~~ FIGURE 4). An O-ring seal element 266 sealingly engages between the seal surface 260 and the seal surface 262. The width of the seal gland, which is defined by the distances between the seal surfaces 260 and 262, is determined by the length of an annular-shaped shoulder 265 of the pin body 216, which determines the squeeze applied to the O-ring seal element 266.

Please replace paragraph [0075] with the following amended paragraph:

[0075] The collar 254 is preferably sized to have a predetermined clearance fit with the bore 188 of the insert body 164 (shown in ~~FIGURE 5~~ FIGURE 4), such that it is free to move for only a limited distance in radial directions 268 with respect to, or transversely to, the longitudinal axis 186 of the bores 188, as determined by the predetermined clearance between the bore 188 and the largest outer diameter of the collar 254. This limited distance determines the range of the squeeze applied to the O-ring 264, which seals between the bore 188 and the seal surface 258. The range of squeeze applied to the O-ring 264 determines the energization for the O-ring 264. The resilience of the O-ring 264, which is squeezed between the collar 254 and the bore 188, tends to center the floating collar 254 within the bore 188.

Please replace paragraph [0076] with the following amended paragraph:

[0076] The spring 246 presses between the retaining collar 230 and the annular ring 253, and is shown in a compressed state after being compressed between the terminus 166 and the insert cap 164 (shown in ~~FIGURES 3 and 5~~ FIGURES 3 and 4). The spring 246 presses the floating collar 254 against the O-ring 266, to squeeze the O-ring 266 between the seal surfaces 260 and 262 (shown in ~~Figure 7~~ FIGURE 6), thereby providing a biasing means for energizing the O-ring seal element 266. The forward end of the pin body 216 is free to move radially with respect to, that is, transversely to the longitudinal axes 186 of the bores 188 in the directions 268 for distances determined by the clearance between the bore 248 of the floating collar 254 and the pin body 216. Thus, the pin body 216 and the annular shaped rib 244 thereof may be moved in the transverse directions 268 relative to the longitudinal axis 220, with the exterior of the pin body 216 pivoting about a pivot point defined by the protuberance 240 of the retaining collar 230. The seal surface 262 defined by the rib 244 will thus move transversely to the longitudinal axis 220 and relative to the forwardly facing seal surface 260 of the collar 254.

Please replace paragraph [0077] with the following amended paragraph:

[0077] ~~FIGURE 8~~ FIGURE 7 is a longitudinal section view of the alignment sleeve 212, taken along section line 3-3 of FIGURE 2. The alignment sleeve 212 has a continuous, solid tubular body 280 which is preferably made of a rigid ceramic material, such as zirconia. In the preferred embodiment, the tubular body 280 is cylindrical and has a central axis 282. The alignment sleeve has a bore 284 which has an interior profile 286 for mating with the peripheries 272 of two of the ferrules 218, over the lengths of the ferrules 218 and the sleeve 212, for aligning the two ferrules 218 together for transmitting light between optical fibers disposed in the bores 276 of the two ferrules 218. The exterior periphery 288 is provided for mating with the profile 208 of a respective one of the four bores 202 of the insert cap 168. Preferably, the profile 286 of the alignment sleeve 212 and the periphery 272 of the ferrule 218 are cylindrical, but in other embodiments may be other mating shapes for aligning the ferrules 218 of abutting ones of the termini 34 for transmitting light therebetween. Similarly, the exterior periphery 288 of the alignment sleeve 212 and the profile 208

of the bores 202 which extend through the insert cap 168 (shown in ~~FIGURE 5~~ FIGURE 4) are also preferably cylindrical, but may also be provided with other mating shapes for aligning and retaining the alignment sleeves 212 relative to the bores 202 of the insert cap 168. The ends 290 and 292 of the bores 284 are beveled to guide contact surfaces 274 of the terminal ends of the termini 34 into respective ones of the bores 284.

Please replace paragraph [0078] with the following amended paragraph:

[0078] ~~FIGURE 9~~ FIGURE 8 is a rearward-end view of the alignment sleeve 212 of ~~FIGURE 8~~ FIGURE 7. Preferably, a cross-section of the tubular body 280 of the sleeve 212 is continuous, such that the tubular body 280 does not have either longitudinal or circumferential splits extending in the body 280, wherein the periphery of tubular body 280 extends continuously around the longitudinal axis thereof. Thus, the continuous, ceramic, tubular body 280 of the alignment sleeve 212 is rigid, and will not easily expand or contract, exclusive of the elasticity of the material from which the alignment sleeve 212 is made, due to forces applied transverse to the central, longitudinal axis 282 of the interior bore 284 by the ferrules 218, or by static or shock forces applied transverse to the ferrules 218, as would prior art spring-type alignment sleeves having longitudinally extending slits in the sidewalls. That is, other than the elastic limits of the ceramic material from which the alignment sleeve 212 is made, the solid sleeve 212 will not expand as would a split sleeve made of spring steel.

Please replace paragraph [0079] with the following amended paragraph:

[0079] ~~FIGURE 10~~ FIGURE 9 is a longitudinal section view of two of the termini 34 which are disposed in a coaxial and abutting alignment for transmitting light signals therebetween. Each of the optical fibers has terminal ends 302 which are aligned for transmitting light therebetween by engagement of respective ones of the ferrules 218 within the continuous alignment sleeve 212. The terminal ends 302 are aligned along a single plane of engagement, which is defined by an alignment of respective mating planes 304 of the terminal ends 302. The mating planes 304 fit flush against one another and extend transverse to respective ones of the longitudinal axes 220 of the termini 34. In other embodiments, the mating planes 304 may be at an angle to respective ones of the longitudinal axes 220. Respective ones of the termini 34 may pivot within the annular engagement points 306 of the gimbal rings provided by the protuberances 240 of the retaining collars 230. The exterior peripheries of the retaining collars 230 fit within the bores 188 in a sliding engagement. The retaining collars 230 are retained within the bores 188 of the insert body 164 (shown in ~~FIGURE 5~~ FIGURE 4) by the annular shoulder defined by the forward face 196 of the terminus retainer 166 (shown in ~~FIGURE 5~~ FIGURE 4). The forward ends of respective ones of the termini 34 are held within the bores 188 of the insert body 164 (shown in ~~FIGURE 5~~ FIGURE 4) by the shoulders 270, which are defined by the forward ends of the annular-shaped ribs 244, engaging the rearward facing shoulder 206 of the insert cap 168 (shown in ~~FIGURE 5~~ FIGURE 4). The termini 34 are gimbaled

for pivoting relative to the contact points between the annular protuberances 240 of the retaining collars 230 and the exterior peripheries 232 of the pin bodies 216. The interior periphery of the alignment sleeve 212 mates with the exterior peripheries of the ferrules 218 of the termini 34, in a slight clearance fit which extends around the circumference of the ferrules 218 and along the lengths of the ferrules 218 and the alignment sleeve 212, which extend parallel to the longitudinal axis 220.

Please replace paragraph [0080] with the following amended paragraph:

[0080] ~~FIGURE 11~~ FIGURE 10 is a forward-end view of the insert body 164. The four bores 188 are shown angularly spaced apart equal distances around the central axis 40, which is perpendicular to the plane of the view of ~~FIGURE 11~~ FIGURE 10. The flat 184 is formed into the top of the insert body 164, and extends parallel to the longitudinal axis 40 to provide a keyway. The two threaded bores 172 are spaced on opposite sides of the axis 40, and extend parallel to the axis 40. A mounting hole 312 extends into the forward end face 313 of the insert body 164 for receiving an alignment pin 315 (shown in phantom) in the press-fit engagement. The alignment pin 315 extends for registering with and extending into a corresponding alignment hole 313 (shown in phantom ~~FIGURE 5~~ FIGURE 4) formed into the rearward face of the insert cap 168 to align the insert cap 168 with the insert body 164 and prevent rotation therebetween.

Please replace paragraph [0081] with the following amended paragraph:

[0081] ~~FIGURE 12~~ FIGURE 11 is a sectional view of the insert body 164, taken along section line ~~12-12 of FIGURE 11~~ 11-11 of FIGURE 10. The two threaded bores 172 are shown extending in a longitudinal direction into the insert body 164, parallel to the longitudinal axis 40. The threaded bores 172 only extend partially into, and not through, the insert body 164. The longitudinal axes 310 for the four bores 188 extend parallel to the longitudinal axis 40. A seal gland 176 extends circumferentially around the exterior periphery of the insert body 164, for receiving a seal member which is preferably an O-ring seal. The flat 184 extends into the outer periphery of the insert body 164. The flat 184 is also parallel to the longitudinal axis 40. Four flats 314 (two shown in ~~FIGURE 12~~ FIGURE 11) are formed into the insert body 164, with two of the flats 314 formed in parallel on the opposite sides of the periphery of the insert body 164. The flats 314 extend parallel to the longitudinal axis 40. Four lip portions 318 (two shown in ~~FIGURE 12~~ FIGURE 11) extend rearward of the flats 314, in a radially outward direction relative to the longitudinal axis 40. An alignment pin 317 extends rearward of the insert body 164 for engaging with an alignment hole 200 in the terminus retainer 166 (shown in ~~FIGURE 6~~ FIGURE 5) to prevent rotation of the terminus retainer 166 and the insert body 164.

Please replace paragraph [0082] with the following amended paragraph:

[0082] ~~FIGURE 13~~ FIGURE 12 is a rearward-end view of the insert body 164. The four flats 314 (shown as hidden lines) are angularly spaced ninety degrees apart around the periphery of 164. The lengths of the flats 314 extend perpendicular to the longitudinal axis 40, and the widths of the flats 314 extend parallel to the plane of the rearward-end view of the insert body 164. Two of the flats 314 are formed into the periphery of the insert body 164 and extend perpendicular to the plane of the two flats 314 shown in ~~FIGURE 12~~ FIGURE 11. Rounded edge surfaces 316 are defined by the outermost periphery of the lip portion 318 disposed between adjacent ones of the flats 314. The lip portions 318 extend outward of the flats 314 of the outer profile 180 of the plug body 164. The four lips 318 are engaged by the tabs 136 on the forward end of the split sleeve 132 (shown in FIGURE 3) to secure the insert body 164 to the split sleeve 132, and trap the outer edge of the terminus retainer 166.

Please replace paragraph [0083] with the following amended paragraph:

[0083] ~~FIGURE 14~~ FIGURE 13 is a partial view of the top of the profile 180 of the insert body 164, as viewed along section line ~~14-14 of FIGURE 12~~ 13-13 of FIGURE 11. The flat 184 is formed into the outer profile 180, defined by the exterior periphery of the insert body 164. The flat 184 extends from the forward end 313 of the insert body 164 to the groove 182, and parallel to the longitudinal axis 40 (shown in ~~FIGURE 11~~ FIGURE 10).

Please replace paragraph [0084] with the following amended paragraph:

[0084] ~~FIGURE 15~~ FIGURE 14 is a longitudinal section view of the split sleeve 132, taken along section line ~~15-15 of FIGURE 2~~ 14-14 of FIGURE 2. The split sleeve 132 has an exterior periphery 142 into which glands 146 and 148 are formed. The split 326 extends through the split sleeve 132, parallel to the longitudinal axis 40. Two windows 328 (one shown) extend through the side walls of the split sleeve 132 to provide access ports for use in assembly of the split sleeve 132 with other components of the connector 12. A groove 320 has a circular shape and is formed into the forward end of the interior of the split sleeve 132, in part defining the interior profile 134 and a flange portion which defines the tabs, or dogs, 136. Outward of the groove 320 is a milled-out region 322, which is milled into the forward end 154 of the split sleeve 132.

Please replace paragraph [0085] with the following amended paragraph:

[0085] ~~FIGURE 16~~ FIGURE 15 is a forward-end view of the split sleeve 132 showing forward flanges disposed on the forward end 154 of the split sleeve 132 to define the tabs, or dogs, 136. The tabs 136 extend inward toward center of the sleeve 132, from the groove 320 (shown in ~~FIGURE 15~~ FIGURE 14), between the milled-out regions 322 and the milled-out regions 324. The tabs 136 engage the flats 314 of the lip portions 318 of the insert body 164 (shown in ~~FIGURES 12, 13 and 23~~

FIGURES 11, 12 and 22).

Please replace paragraph [0086] with the following amended paragraph:

[0086] ~~FIGURE 17~~ FIGURE 16 is a partial section view of the forward end 154 of the split sleeve 132, taken along section line ~~17-17 of FIGURE 16~~ 16-16 of FIGURE 15. The milled-out region 324, the split 326 and the milled-out region 322 are shown extending into the forward end 154, to the groove 320, and together define the forward flanges 136.

Please replace paragraph [0087] with the following amended paragraph:

[0087] ~~FIGURE 18~~ FIGURE 17 is a rearward-end view of the split sleeve 132. The dogs 138 are separated by the milled regions 336. Preferably, four dogs are provided with tabs 138 which extend inward from the outer periphery 142, are angularly spaced at equal angular distances around the longitudinal axis 40, and separated by the milled-out regions 336.

Please replace paragraph [0088] with the following amended paragraph:

[0088] ~~FIGURE 19~~ FIGURE 18 is a partial sectional view of the rearward end of the split sleeve 132, taken along section line ~~19-19 of Figure 18~~ 18-18 of FIGURE 17. The tabs 138 extend inward from the interior periphery 142 of the split sleeve 132. Milled regions 336 extend inward from the rearward end of the split sleeve 132 to define the tabs 138. The groove 332 of circular shape extends within the split sleeve 132 to define the interior profile 134 of the sleeve 132. The split 326 extends through two opposite sides of the body of the split sleeve 132.

Please replace paragraph [0089] with the following amended paragraph:

[0089] ~~FIGURE 20~~ FIGURE 19 is an elevation view of the split sleeve 132, after the sleeve 132 has been rotated ninety degrees around the central axis 40 from the position shown in Figure 14. The windows 328 extend into the sides of the split sleeve 132. The milled region 324 extends into the forward end 154. Two of the rearward tabs 138 are shown.

Please replace paragraph [0090] with the following amended paragraph:

[0090] ~~FIGURE 21~~ FIGURE 20 is ~~an exploded~~ a side view of the retaining assembly 100. The forward end of the retainer body 102 is threaded for receiving the retaining nut 106, which retains the wedge member 104 within the retainer body 102. The retaining groove 110 has a circular shape

and extends to an exterior periphery of the retainer body 102. The seal gland 116 has a circular shape and extends into the exterior periphery of the Kevlar retainer body 102.

Please replace paragraph [0091] with the following amended paragraph:

[0091] ~~FIGURE 22~~ FIGURE 21 is a forward-end view of the retainer body 102. Four milled regions 342 extend forward of the retaining groove 110. The milled regions 342 and the retaining groove 110 together define four tabs, or engagement dogs, 344. The four engagement dogs 344 are spaced equal angular distances apart around the central longitudinal axis 40 of the retainer body 102 for interlocking with the tabs 138 on the rearward end of the split sleeve 132, when the tabs 138 are located in the retaining groove 110. (See also ~~FIGURES 15, 18 and 19~~ 14, 17 and 18).

Please replace paragraph [0092] with the following amended paragraph:

[0092] ~~FIGURE 23~~ FIGURE 22 is a longitudinal section view of an assemblage of the insert body 164, the split sleeve 132, the retainer body 102 and the terminus retainer 166, taken along section line 22-22 of Figure 2. The tabs 136 of the forward end 154 of the split sleeve 132 engage against the flats 314, and interlock with the retaining lip portion 318 of the insert body 164. The tabs 138 on the rearward end of the split sleeve 132 engage within the groove 110 to interlock with the engagement dogs 344 of the retainer 102. Once the split sleeve 132 is interlocked with the insert body 164, the terminus retainer 166 and the retainer 102, the entire assembly slides within the sleeve 42, and the seal rings 118 and 178 sealing engage therebetween. The seal rings 150 and 152 are O-rings which are used as garter springs to keep the two halves of the split sleeve 132 clamped together over the insert body 164, the terminus retainer and the retainer body 102.

Please replace paragraph [0093] with the following amended paragraph:

[0093] ~~FIGURE 24~~ FIGURE 23 is a cross-sectional view of the two fiber optic connectors after they have been coupled together, taken along section line 2-2 of FIGURE 1. This view shows the relative positions of the insert cap tower 18 and the tangs 20 and 22 in the above-described keying arrangement shown in FIGURE 2.

Please replace paragraph [0094] with the following amended paragraph:

[0094] ~~FIGURE 25~~ FIGURE 24 is a cross-sectional view of the two fiber optic connectors after they have been coupled together, taken along section line 2-2 of FIGURE 1. This view shows the relative positions of the insert cap tower 18 and the tangs 20 and 22 in the above-described keying arrangement shown in FIGURE 2.

Please replace paragraph [0095] with the following amended paragraph:

[0095] ~~FIGURE 26~~ FIGURE 25 is a cross-sectional view of a second alternative keying arrangement for the two fiber optic connectors 12, showing the connectors 12 as they would appear after being coupled together and taken along section line 2-2 of FIGURE 1. The relative positions of the plug body 18 and the tangs 20 and 22 are shown in the second alternative keying arrangement.

Please replace paragraph [0097] with the following amended paragraph:

[0097] ~~FIGURE 27~~ FIGURE 26 is a partial longitudinal section view of a cable retainer 400 for use in a fiber optic connector 12, secured to the sleeve 132. The cable retainer has an interior passage 401. Threads 413 are preferably formed in the interior passage 401. Typically, a fiber optic cable will have eight optical conductors and a KEVLAR™ sheath which extends around the exterior of the fiber optic conductors, and within a protective outer armor. The outer armor is typically formed of plastic and is cut on make-up with fiber optic cable connector. The outer armor will preferably be cut from around the KEVLAR™ sheath and the fiber optic conductors, to either extend into the interior passage 401 and beyond the threads 413 if the outer armor is not bonded to the KEVLAR™ sheath, or such that the outer armor does not extend beyond the rearward end of the retainer member 400 if the outer armor is bonded to the KEVLAR™ sheath. Thus, if the outer armor is not bonded to the KEVLAR™ sheath which extends around the fiber optic conductors, the threads 413 will hold the outer armor in place with respect to the KEVLAR™ sheath and the fiber optic conductors, once the KEVLAR™ sheath is secured to the retainer 400.

Please replace paragraph [0099] with the following amended paragraph:

[0099] ~~FIGURE 28A~~ FIGURE 27 is a longitudinal section view of the retainer 400. An interior passage 450 extends longitudinally through the retainer 400. The forward end of the interior passage 450 has a conically shaped interior profile 403 for receiving a mating exterior profile defined by the conically shaped exterior periphery 399 of the conic member 402. The rearward end portion of the interior passage 350 has interior threads 352 which preferably have a sharp, V-shaped cross section such that they will bite into the exterior plastic armor of a conventional fiber optic cable.

Please replace paragraph [0100] with the following amended paragraph:

[0100] ~~FIGURE 28B~~ FIGURE 28 is an end view of the retainer 400. The central portion 398 of the retainer 400 has a hexagonally-shaped periphery 454 defined by flats 456 formed into the exterior surface of the central portion 398.

Please replace paragraph [0101] with the following amended paragraph:

[0101] FIGURE 29 is a longitudinal section view of a hermaphroditic, fiber optic connector 460 having translating termini. Fiber optic connector 460 includes a first connector at 462 and a second connector at 464. The connector at 462 and 464 have respective housings 466 and 468, which are longer than the housings of the fiber optic connector 10 shown in FIGURES 1 ~~through 26~~ through 27. The fiber optic connector 460 has translating termini 472 and termini 474, which are aligned within alignment sleeve 476. The alignment sleeve 476 is preferably a ceramic climate sleeve having a solid angular-shaped cross section, such as that discussed above for the alignment sleeve 212 of ~~FIGURES~~ FIGURES 7 and 8, that another embodiment may also be a slotted type alignment sleeve or made of materials other than ceramic. The fiber optic connector 460 includes insert caps 478 having end faces 480. It should be noted that the translating terminus 472 has a ferrule 482 with a terminal and 484 which fits flush with the end face 480 of the insert cap 478, when the two connector halves 462 and 464 are not moving.

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